BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

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APPLICATION TO CHANGE WATER RIGHT NO. 41M 30151736 BY CURRY CATTLE CO.	**)** **)** **)**	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

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On March 15, 2021, Curry Cattle Co. (Applicant) submitted Application to Change Water Right No. 41M 30151736 to change Beneficial Water Use Permit No. 41M 7039-00 to the Havre Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under §85-2-302, Montana Code Annotated (MCA), dated August 26, 2021. A major amendment was received December 2, 2022, restarting the statutory timeline of the Application. The Applicant responded with information dated December 23, 2021. The Application was determined to be correct and complete as of May 25, 2023. An Environmental Assessment for this Application was completed on June 1, 2023.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application to Change Water Right, Form 606-IR
- Attachments: Table 1. Reservoir Operation Water Balance (Amended); Table 2a. Historic Diverted Volume, Consumptive Use, & Return Flows (Amended), Table 2c. Consumptive Use Summary (Amended); Table 3. Authorized, Historic, and Proposed Place of Use; Bowl Performance Curve Per Stage; Cartwright Coulee StreamStats Report; Table 4 Proposed Place of Use (Amended)
- Maps: Historic Use 41M 7039-00, Proposed use 41M 7039-00
- Change in Place of Storage Addendum, Form 606-PSA

Information Received after Application Filed

- Deficiency Letter response from Applicant to DNRC dated December 15, 2022

- Project completion notice filed July 16th, 1976, and Provisional Permit was verified on July 13th, 2022
- Major Amendment to Application including Waiver of Adverse Effect Received December 2, 2022
- Historical Use Addendum Received June 5, 2023

Information within the Department's Possession/Knowledge

- Department file for Provisional Permit No. 41M 7039-00
- Water rights records for surrounding area
- Department's Technical Report

The Department also routinely considers the following information. The following information is not included in the administrative file for these applications but is available upon request. Please contact the Havre Regional Office at 406-265-5516 to request copies of the following documents.

- DNRC Return Flow Memo, Dated April 1, 2016

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Applicant seeks to change the following Provisional Permit No. 41M 7039-00 for 3.00 CFS flow rate from Cartwright Coulee for the purpose of irrigation with a priority date of December 9, 1975. This is a perfected permit that was verified on July 13, 2022. The period of diversion and period of use are April 1st – November 30th. The place of use is 370 acres in the SWNE, SENW, SWNW, NESE, NWSE, SESE, SWSE, NESW, NWSW, SESW and SWSW Section 5, NENE, NWNE, NENW, and NWNW Section 8 Township (T) 29N Range (R) 6W Pondera County. The point of diversion is a pump in the SENWNW Section 5, T29N T6W Pondera County. Provisional Permit 41M 7039-00 is not supplemental with any other water rights.

Table 1: WATER RIGHTS PROPOSED FOR CHANGE

W.R. NO.	FLOW RATE	VOLUME	PURPOSE	PERIOD OF USE	PLACE OF USE	POINT OF DIVERSION	PRIORITY DATE
41M 7039-00	3.00 CFS	1,230 AF	IRRIGATION	APRIL 1 – NOVEMBER 30	SWNE, SENW, SWNW, NESE, NWSE, SESE, SWSE, NESW, NWSW, SESW and SWSW Section 5, NENE, NWNE, NENW, and NWNW Section 8 T29N R6W Pondera County	SENWNW Section 5, T29N T6W Pondera County	12/9/1975

1) There are no previous change authorizations on Provisional Permit 41M 7039-00.

CHANGE PROPOSAL

FINDINGS OF FACT

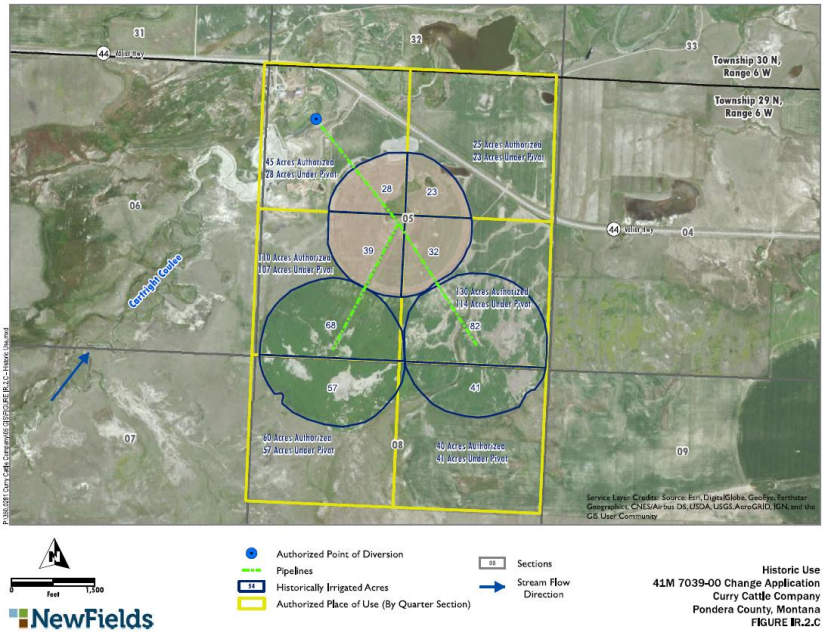


Figure 1: Historic Use WR Change Provisional Permit 41M 7039-00

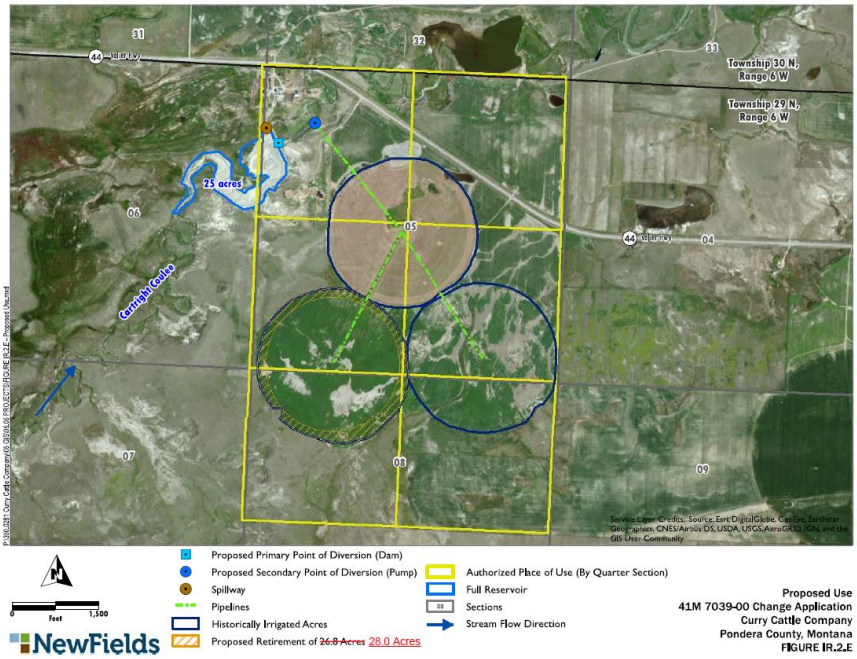


Figure 2: Proposed Use WR Change Provisional Permit 41M 7039-00

2. The requested change adds an additional point of diversion, place of use, and place of storage. The proposed primary point of diversion is located at SWNWNW of Section 5 T29N R6W (dam). The proposed secondary (existing) point of diversion is located at SENWNW Section 5 T29N R6W (pump). The place of use will remain in the NE, NW, SW, SE Section 5 T29N R6W Pondera County and NE, NW Section 8 T29N R6W Pondera County. 28.0 acres are being retired from SW Section 5 T29N R6W & NW Section 8 T29N R6W Pondera County. The proposed additional place of storage is a 125-acre feet on-stream reservoir with a dam located on Cartwright Coulee in the SWNWNE Section 5, T29N R6W Pondera County. Cartwright Coulee is a tributary to Birch Creek. The purpose of the water right will not change.

3. All existing irrigation infrastructure associated with this right will remain the same under the proposed change, except the addition of the reservoir and a reduction of 28 irrigated acres. For the irrigated acres remaining under the proposed change, the same system and same operation will be used as before.

CHANGE CRITERIA

4. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
> (b) The proposed means of diversion, construction, and operation of the

appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.
(c) The proposed use of water is a beneficial use.
(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

5. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historic Use

Historical Background:

6. 41M 7039-00 is a provisional permit granted and in use since June 9, 1976. A historical use addendum was submitted to the Department on June 5, 2023. The maximum historical use of Provisional Permit 41M 7039-00 found is 370.0 acres, which is found in the verification done on July 13, 2022. The historical use was center pivot sprinkler irrigation. Crops grown on the

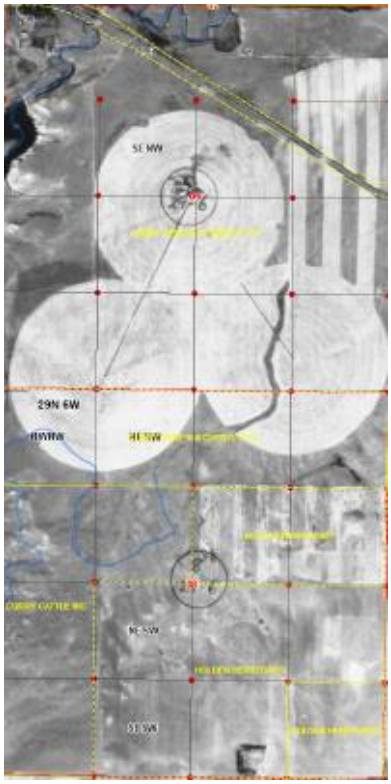
place of use are rotated and have included alfalfa, barley, wheat (spring and winter), canola, durum, triticale.

7. The previous owner of the water right built the subject reservoir on Cartwright Coulee sometime after the permit was perfected in June 1976. The reservoir captured and regulated flows on Cartwright Coulee so that the pump diverting water pursuant to 41M 7039-00 had a steady, sustainable flow rate. When the Applicant purchased the property, that practice continued, under the belief that the reservoir was permitted under 41M 7039-00. The reservoir, however, is not permitted under 41M 7039-00.

8. The Applicant submitted the following historic use via the Historic Use Addendum:

WR #	Priority Date	Diverted Volume	Flow Rate	Purpose (Total Acres)	Consump. Use	Place of Use	Point of Diversion
41M 7039-00	4/1 – 11/30	1,230 AF	3.0 CFS	Irrigation 370.0 acres	598.0 AF	SWNE, SENW, SWNW, NESE, NWSE, SESE, SWSE, NESW, NWSW, SESW and SWSW Section 5, NENE, NWNE, NENW, and NWNW Section 8 T29N R6W Pondera County	SENWNW Section 5, T29N T6W Pondera County

Figure 3: Curry Cattle Co. 1979 Aerial Sections 5 & 8 T29N R6W Pondera County



Historical Flow Rate:

9. As verified by the Department, Provisional Permit 7039-00 has a flow rate of 3.0 CFS for irrigation from Cartwright Coulee at a point of diversion located in the SENWNW Section 5, T29N R6W, Pondera County. Water has been diverted from Cartwright Coulee through a Johnston Pump Company 4-stage, 150 horsepower turbine pump located in the SENWNW of Sec. 5, T29N, R6W, Pondera County. The permitted flow rate is 3.0 CFS (1,300 GPM). The maximum capacity of the pump is approximately 3.8 CFS (1,700 GPM).

Supplemental Water Rights:

10. Water Right 41M 7039-00 is not supplemented by other water rights on the permitted place of use.

Period of Diversion/Use:

11. The diverted water was conveyed to the pivots through a 10-inch diameter pipeline that runs from the pump to the center tower of the northern pivot (approximately 2,400 feet). At the center of the norther pivot, two 8-inch diameter pipelines tie into the 10-inch pipeline, and run, respectively, to the center tower of the southeastern and southwestern pivots (Approximately 2,500 feet, each 8-inch pipeline). All pipelines are Transite (cement). Water flow to the pivot sprinklers is controlled by butterfly valves located at the pump (to throttle overall deliveries) and at the center tower of each pivot. Pursuant to nozzle specifications, each pivot has a cumulative flow rate of approximately 660 gpm (1.5 CFS, or 50% of the permitted flow rate of 3 CFS). The pivots operate one or two at a time; each pivot uses 50% of the permitted flow rate, so two pivots irrigating simultaneously use 100% of the permitted flow rate.

Place of Use:

12. The historic place of use is SWNE, SENW, SWNW, NESE, NWSE, SESE, SWSE, NESW, NWSW, SESW and SWSW Section 5, NENE, NWNE, NENW, and NWNW Section 8 T29N R6W Pondera County and is irrigated by three center pivots. The place of use before the verification process was 310 acres in all of Section 5 & 100 acres in SE, NE NW 29N 6W Pondera County with a total of 410 acres. After additional information from the Applicant, the verification determined that 370.0 acres is more accurate to the historical use. The Department found in the verification process as well as aerial photos (Figure 3) that 370 acres of irrigation were historically used instead of the 410 acres.

Diverted and Consumed Volume:

13. The Applicant found a historic consumptive use of 598.0 AF and a historic diverted volume of 747.0 AF as shown in Figure 4 below. The historic water use calculations carried forward by the Applicant in this Application No. 41M 30151736 utilize the Department's historical consumptive use methodology (ARM 36.12.1902(16)), based on the Valier weather station and Pondera County management factor (Figure 4), and an on-farm efficiency of 70% which is appropriate for sprinkler irrigation.

14. The Department finds 3.0 CFS historical flow rate and 1,230 AF of historical volume.

Figure 4: Historical Consumptive and Diverted Use

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)	Non-Consumed Volume (AF)
Center-pivot Sprinkler	370.0	20.96	81.0%	70%	523.5	747.8	74.8	598.3	149.5

1 Valier IWR Weather Station

2 1973-2006 Pondera County Historical Use Management Factor

FINDINGS OF FACT – Adverse Effect

15. The purpose of the reservoir is to regulate flows on Cartwright Coulee and provide a sustainable flow rate at the permitted pump location. The proposed change does not seek to increase the pumping rate, or the number of acres irrigated. The applicant intends to continue pumping water at no more than 3.0 CFS to operate up to two pivots at time. The proposed reservoir operations dampen diversion impacts on annual streamflow by capturing high streamflow in early spring and releasing that water in mid and late summer to increase streamflow which would provide instream flow for downstream users.

16. The Applicant asserts that return flows associated with the retired acreage are not reflected as being bypassed through the reservoir in the non-irrigation season because (1) the reservoir is left empty during the non-irrigation season and bypasses all flows, (2) the April 1, 2016 DNRC return flow policy states no re-timing of return flow is necessary,, the Applicant is already appropriating them under his separate water right 41M 34019-00. 125 AF capacity of the reservoir that will be diverted as a result of the change is currently being diverted by the permit for irrigation.

17. The Applicant owns the next diversion downstream on Cartwright Coulee from this water right. This next diversion is an on-stream reservoir associated with The Applicant's water right 41M 34019-00. The Applicant has been operating the reservoir associated with 41M 34019-00 in the same manner as it was historically appropriated in 1981. Under that operation, the release structure on the reservoir associated with 41M 34019-00 is closed during the wintertime, and the reservoir does not spill during that time. Accordingly, any non-irrigation season return flows associated with 41M 7039-00 have been diverted and stored by the reservoir authorized under 41M

34019-00 and have not been used by any other water user. Both ARM 36.12.101(62) and ARM 36.12.1903 establish that the requirement to maintain the timing of return flows is only required to the extent that another water user is reasonably entitled to the use of that water and has relied upon the use of those return flows. The Applicant does not assert any adverse impact to 41M 34019-00 from this project, and pursuant to MCA §85-2-311(9) they consent to the approval of this Application.

18. To analyze the criteria required in §85-2-402, MCA, the historical consumed volume for sprinkler irrigation of 370 acres is 598.3 AF, the diverted but non-consumed volume is 149.5 AF, the historical diverted volume is 1,230.0 AF, and the location of historical return flows are to Cartwright Coulee downstream of the western boundary of Section 7, Township 29 North, Range 6 West (Figure 5).

19. Under the proposed change the consumed volume for sprinkler irrigation of 342 acres is 544.4 AF.

20. The Applicant provided net evaporation from the reservoir is estimated using the methods described in DNRC (2018) and climate data (i.e., precipitation and temperature) from the Valier monitoring station of the Western Regional Climate Center (WRCC; station number 2485014). The evaporation estimates assume a full reservoir (25 acres, Figure IR.2.E) over the full irrigation season. The Valier climate monitoring station is approximately 8 miles east of and 70 feet higher in elevation than the Applicant's proposed reservoir. Net evaporation is calculated by subtracting average precipitation from gross evaporation (DNRC, 2018). Average precipitation data are Valier WRCC station data, as shown in Table 1. Gross evaporation is calculated as 75% of the Penman/Linacre method described Potts (1988), as directed by Department policy (2018); gross evaporation calculations are shown in Attachment 1.C of the Application materials and results are shown in Table 1 of the Application materials.

21. Operationally, the Applicant intends to fill the reservoir at the beginning of the irrigation season and empty the reservoir by the end of the irrigation season. Therefore, evaporative losses from the reservoir only occur during the irrigation season. Estimated average irrigation season precipitation on the 25 acre reservoir is 23 ac-ft. Estimated gross evaporation from the 25 acre reservoir during the irrigation season is 69 ac-ft. Therefore, estimated net evaporation from the 25 acre reservoir is 46 AF (100% consumptive).

22. The total consumed volume of both the proposed storage and the continued irrigation is equal to 589.6 AF, which is less than the historically consumed volume of the water right. The proposed diverted volume is 690 AF. The non-consumed volume is 60.4 AF. The return flows would accrue to the same location on Cartwright Coulee as historical practices (Figure 5).

23. The Applicant proposes to retire 28.0 acres from irrigation, which equates to 46 ac-ft per year of reduced consumptive use. The Applicant states that these calculations following ARM 36.12.1902 procedures and show that there will be no increase in total consumptive use between historic use (598 AF/YR consumptive irrigation) and proposed use (598 AF/YR consumptive use from irrigation and reservoir evaporation).

24. The Applicant proposes to retire the 28.0 acres from the southwest pivot which is located half in the SW of Section 5 and half in the NW of Section 8 (Figure IR.2.E). The historic irrigated acreage under the southwest pivot is approximately 125 acres (Figure IR.2.C; 68 acres in Section 5 and 57 acres in Section 8). Proposed irrigated acreage under the southwest pivot is approximately 97 acres.

25. The southwest pivot has sprinklers spaced every 10 ft and no end gun. Circular pivots of 125 acres (the historically irrigated area under the southwest pivot) and 97 acres (the proposed irrigated area under the southwest pivot) has a radii of 1,317 ft and 1,170 ft, respectively. Therefore, the radial reduction in irrigated area under the southwest pivot is 157 feet. At 10-foot sprinkler spacing, this radial reduction equates to turning off 16 sprinklers. The Applicant proposes to turn off the outermost 16 sprinklers on the southwest pivot to retire the 28.0 acres and fully offset the consumptive evaporative losses associated with the proposed reservoir and prevent adverse effects to other water users.

26. Applicant proposes to install a measuring device on the main pipeline running from the pump. Diversion to pivots will be measured by a totalizing flowmeter on the pipeline to the pivots. Storage volume will be measured by measuring reservoir stage and referring to a reservoir stage-volume rating table. Accordingly, by measuring storage at the reservoir and diversions at the pump, Applicant will ensure total diversions from natural flow on Cartwright Coulee will not exceed 3 CFS.

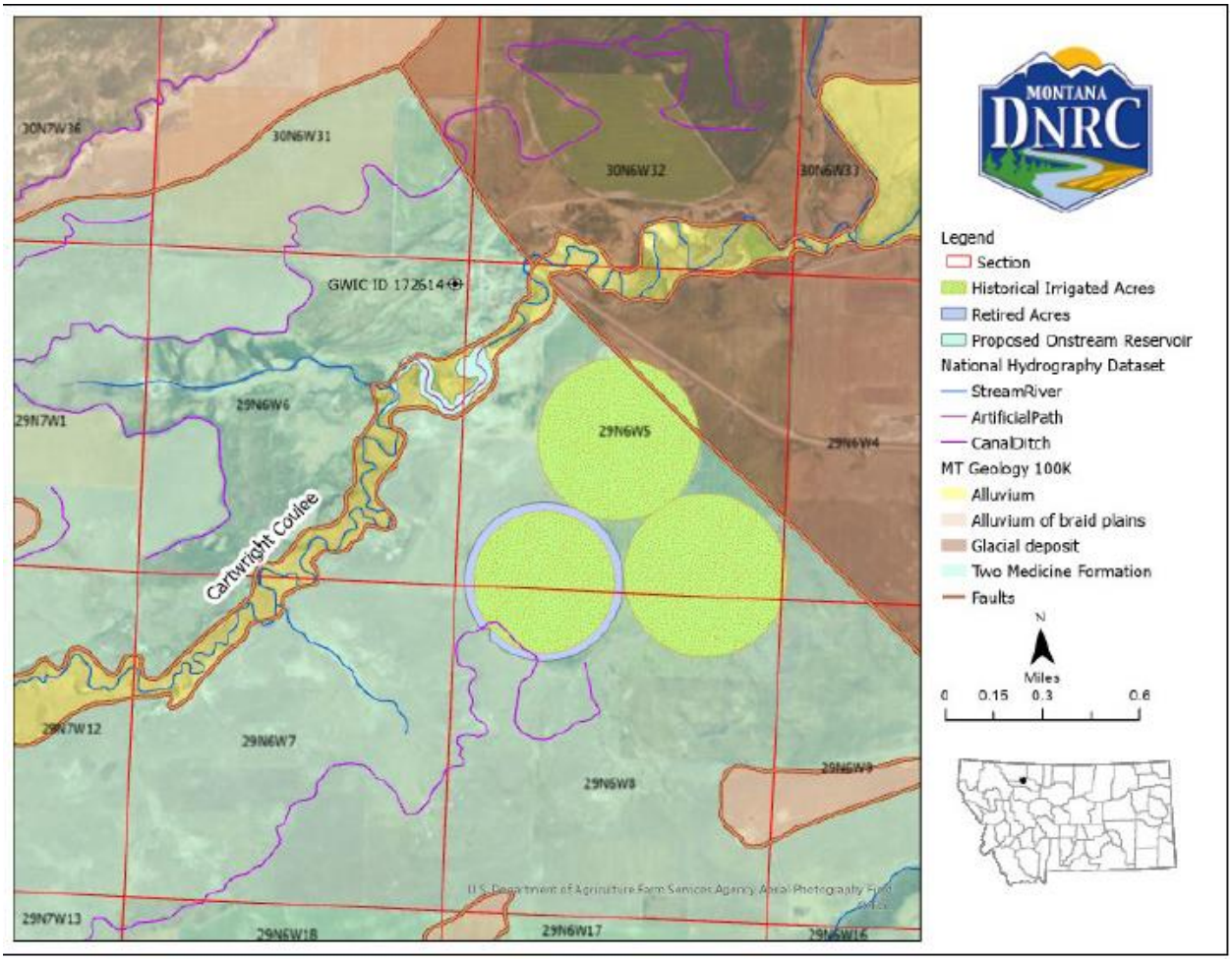


Figure 5: Location of historical and retired acres for Provisional Permit No. 41M 7039-00 and Cartwright Coulee, the receiving stream for return flows.

Figure 6: Historic and Proposed Acres for Curry Cattle Co.

Place of Use	Section	Historic Acres	Original Proposed Acres	Amended Proposed Acres
SWNE	5	22.6	22.6	22.6
SWNW	5	0.8	0.8	0.8
SENW	5	29.7	29.7	29.7
NWSW	5	2.6	*1.5*	1.5
NESW	5	38.6	*37*	37
SWSW	5	31.7	*26.1*	*25.8*
SESW	5	36.8	*31.7*	*31.4*
NWSE	5	33.7	33.7	33.7
NESE	5	5.5	5.5	5.5
SWSE	5	38.1	38.1	38.1
SESE	5	36.5	36.5	36.5
NWNE	8	19.7	19.7	19.7
NENE	8	19.6	19.6	19.6
NWNW	8	24	*17.3*	*17*
NENW	8	30.1	*23.4*	*23.1*
	Total Acreage	370	343.2	342
	Acreage Difference		26.8	28
	*The *italicized* indicates a change in the acres following the application amendment, black font indicates there are no changes			

BENEFICIAL USE

FINDINGS OF FACT

20. Applicant (Curry Cattle Co.) proposes to use water to irrigate 342.0 acres using three center pivots. Irrigation is identified as a beneficial use of water pursuant to §85-2-102(4)(a), MCA.

21. Applicant proposes to use 690.0 AF diverted volume, 598.0 AF/yr of consumptive use, and a 3.0 CFS flow rate. This amount is supported by Administrative Rule and Department Policy. The purpose of the reservoir is to regulate flows on Cartwright Coulee and provide a sustainable flow rate at the permitted pump location.

ADEQUATE DIVERSION

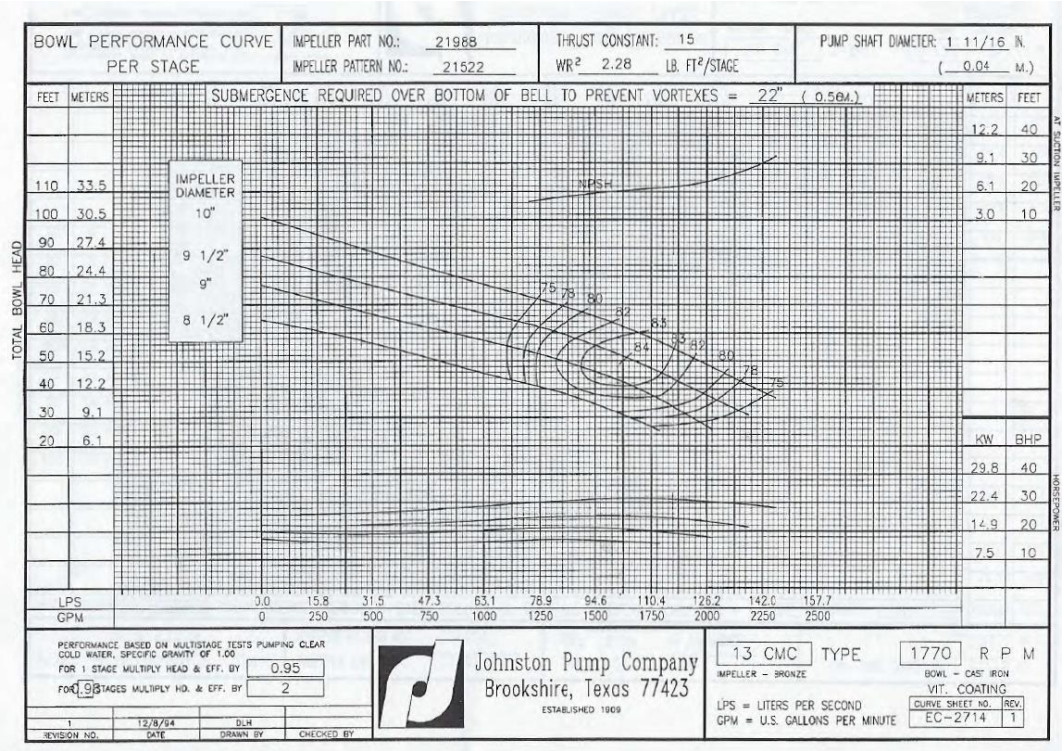
FINDINGS OF FACT

22. The water is diverted from Cartwright Coulee through a Johnston Pump Company 4-stage, 150 horsepower turbine pump located in the SENWNW of Sec. 5, T29N, R6W, Pondera County. The diverted water is conveyed to the pivots through a 10-inch diameter pipeline that runs from the pump to the center tower of the northern pivot (approximately 2,400 feet). At the center of the norther pivot, two 8-inch diameter pipelines tie into the 10-inch pipeline, and run, respectively, to the center tower of the southeastern and southwestern pivots (approximately 2,500 feet, each 8-inch pipeline). All pipelines are Transite (cement).

23. Water flow to the pivot sprinklers is controlled by butterfly valves located at the pump (to throttle overall deliveries) and at the center tower of each pivot. Pursuant to nozzle specifications, each pivot has a cumulative flow rate of approximately 660 gpm (1.5 cfs, or 50% of the permitted flow rate of 3 cfs). The pivots operate one or two at a time; each pivot uses 50% of the permitted flow rate, so two pivots irrigating simultaneously use 100% of the permitted flow rate.

24. The new permitted storage has a capacity of 125 AF, with the surface area of 25 feet and the maximum depth of 12.5 feet.

Figure 7: Curry Cattle Co. Pump Specification



POSSESSORY INTEREST

FINDINGS OF FACT

25. The applicant signed the affidavit on the application form affirming the applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

26. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one

may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).[1]

27. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342,

[1] DNRC decisions are available at:
http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11,103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.[2]

28. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.[3] A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pgs. 11-12 (proof of historic use is required even

[2] See also Holmstrom Land Co., Inc., v. Newlan Creek Water District,185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

[3] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9,1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).[4]

29. An Applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields,

[4] Other western states likewise rely upon the doctrine of FOF use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 - 57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76l By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); Admin. R.M. 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).[5]

30. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731. Noted Montana Water Law scholar Al Stone explained that the water right holder who seeks to change a water right is unlikely to receive the full amount claimed or historically used at the original place of use due to reliance upon return flows by other water users. Montana Water Law, Albert W. Stone, Pgs. 112-17 (State Bar of Montana 1994).

31. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern

[5] The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(*citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

> of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow. . . .
> An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights.
> This fundamental rule of Montana water law has dictated the Department's determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

32. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. Admin.R.M. 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. Admin.R.M. 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. Admin.R.M. 36.12.1901 and 1903.

33. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the

location of diversion, it is essential that the change also not enlarge an existing right. See MacDonald, 220 Mont. at 529, 722 P.2d at 604; Featherman, 43 Mont. at 316-17, 115 P. at 986; Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004).

34. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. Admin. R. M. 36.12.1902 (16). In the alternative an applicant may present its own evidence of historic beneficial use. In this case Applicant has elected in part to proceed under Admin. R.M. 36.12.1902. (FOF No.13).

35. If an applicant seeks more than the historic consumptive use as calculated by Admin.R.M .36.12.1902 (16), the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., supra; Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988) (historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo. 1980) (historical use could be less than the optimum utilization "duty of water").

36. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Beneficial Water Use Permit No. 41M 7039-00 of 1,230.0 AF diverted volume and 3.0 CFS flow rate with a consumptive use of 598.0 AF. (FOF Nos. 6-13)

37. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(b), MCA. (FOF Nos. 15-26)

BENEFICIAL USE

38. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. Admin.R.M. 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); §85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

39. Applicant proposes to use water for pivot irrigation which is a recognized beneficial use. §85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 690 acre-feet of diverted volume and 3.0 CFS flow rate of water requested is the amount needed to sustain the beneficial use §85-2-402(2)(c), MCA (FOF Nos. 20-21)

ADEQUATE MEANS OF DIVERSION

40. Pursuant to §85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6th Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

41. Pursuant to §85-2-402 (2)(b), MCA, applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 22-24)

POSSESSORY INTEREST

42. Pursuant to §85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also Admin.R.M. 36.12.1802

43. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF No. 25)

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41M 30151736 should be granted subject to the following.

The Applicant is authorized to add an additional point of diversion, place of use, and add place of storage. The proposed primary point of diversion is located at SWNWNW of Section 5 T29N R6W (dam). The secondary existing point of diversion is located at SENWNW Section 5 T29N R6W (pump). The place of use will remain in the NE, NW, SW, SE Section 5 T29N R6W Pondera County and NE, NW Section 8 T29N R6W Pondera County. 28.0 acres are being retired from SW Section 5 T29N R6W & NW Section 8 T29N R6W Pondera County. The place of storage is a 125-acre feet on-stream reservoir with a dam located on Cartwright Coulee in the SWNWNE Section 5, T29N R6W Pondera County Cartwright Coulee is a tributary to Birch Creek.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and §85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§85-2-310, -312, MCA.

DATED this 21st day of September, 2023.

/Original signed by Matt Miles/
Matt Miles, Manager
Havre Regional Office
Department of Natural Resources
and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 21st day of September, 2023, by first class United States mail.

RYAN MCLANE
P.O. BOX 1155
HELENA, MT 59624

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Havre Regional Office, (406) 265-5516